

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
22 February 2001 (22.02.2001)

PCT

(10) International Publication Number
WO 01/13321 A1

(51) International Patent Classification⁷: **G06K 7/08**

(21) International Application Number: **PCT/GB00/03092**

(22) International Filing Date: **11 August 2000 (11.08.2000)**

(25) Filing Language: **English**

(26) Publication Language: **English**

(30) Priority Data:
9919100.9 12 August 1999 (12.08.1999) GB

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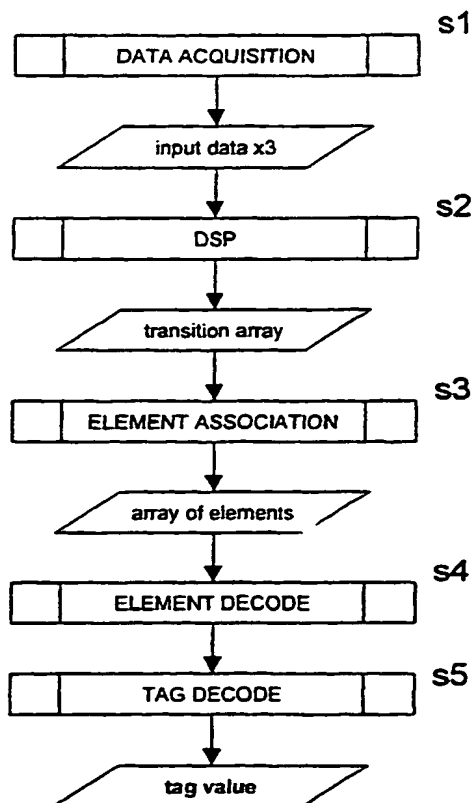
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(81) Designated States (*national*): **AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.**

(84) Designated States (*regional*): **ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European**

[Continued on next page]

(54) Title: **DETERMINING PROPERTIES OF MAGNETIC ELEMENTS**



(57) Abstract: A method of determining differing characteristics of magnetic dipole elements such as orientation, coercivity, bias and response amplitude and a tag reader for reading magnetic tags containing such elements. The elements are scanned by a rotating magnetic field and two sets of transition data are determined. The transition data sets are associated with respective elements and analysed to determine mean field values resolved along the element vectors. These field values are used to determine properties of the elements, such as coercivity.

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